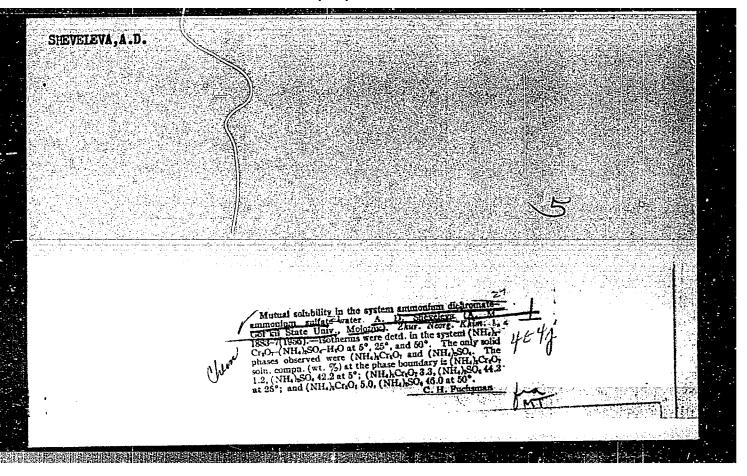
SHEVELEVA, A.B.

[Progressive practices in public health] O peredovom opyte zdravookhraneniia. Moskva, Medgiz, 1956. 1 v. (MLRA 10:1) (PUBLIC HEALTH)



SHEVELEVA, A.D.

USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8 Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14712

Author : A. D. Sheveleva Inst : Molotov University

Title : Physical-Chemical Study of Complex Formation Processes

of Diantipyrylmethane with Inorganic Acids.

Abstract: The interaction between diantipyrylmethane $C_{23}H_{24}O_{2}N_{4}$ (I) and aqueous solutions of HCl and $H_{2}SO_{4}$ was studied.

(I) and aqueous solutions of not and hypothesis are formed in the system $I-HC1-H_2O$, their composition was determined by the residue method at 20° and it answers I.HCl and I.2HCl. Two compounds are formed also in the system $I-H_2SO_4-H_2O$; their composition was established by the isothermal method at 52° :

I.H₂SO₄ and I.2H₂SO₄.

Card 1/1

5. 4210 5. 4110 5(4), 5(3)

Sheveleva, A. D.

67840 S/153/59/002/06/011/029 B115/B000

TITLE:

Investigation of the Equilibrium of the Liquid Phases in the System Water - Isooctane | Aniline \

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 6, pp 881 - 885 (USSR)

ABSTRACT:

In this paper, the results of an experimental investigation of the ternary system mentioned in the title at temperatures ranging from 20 to 130° are given. In binary systems consisting of the components of the ternary system given, a phase separation was found to take place. The upper critical homogenization temperature in the systems water — aniline and aniline—isooctane is lower than it is in the system water—isooctane. In ternary systems, equilibrium is reached at temperatures higher than the critical homogenization temperatures of the individual two-component systems. The conditions for the establishment of such an equilibrium were already earlier described in detail (Ref 1) when it was recognized that not only the geometrical character of the phase-composition diagram, but chiefly the interaction of the system-forming

Card 1/4

67840

Investigation of the Equilibrium of the Liquid S/153/59/002/06/011/029 Phases in the System Water - Isooctane - Aniline E115/B000

components represents the determining factor in the liquid three-phase system. In order to verify this law, the ternary system mentioned in the title was studied. The composition of the solutions and the temperatures of homogenization are given for the binary system aniline - isooctage (Fig 1), the critical maximum temperature of it being 81.2°. The critical temperature of homogenization for the water - aniline system (168°) was found in publications (Ref 3). In addition, the composition of mutually saturated solutions of the system water - isooctane was established at 70 and 80° by isothermal titration, and, at elevated temperatures, by graphic extrapolation. To determine the concentration limits of the threephase equilibrium and its change with temperature, the polythermal method developed by Alekseyev (Ref 4) was used. Temperatures measured when three liquid phases were formed and the component mixtures prepared synthetically were completely homogenized were recorded. Five polythermal sections of the phase triangle were investigated (Figs 2-5). On these sections, the content of two components is varied, while the content of the third is kept constant. In figures 2 to 4,

Card 2/4

67840

Investigation of the Equilibrium of the Liquid S/153/59/002/06/011/029 Phases in the System Water - Isooctane - Aniline B115/B000

temperature-concentration diagrams representing the temperatures of the formation of three liquid phases and of complete homogenization in dependence on the percentage of the components are represented. In figure 5, the isothermal sections for the representation of which polythermal sections and graphic extrapolation were used, are illustrated. From the diagrams, it is evident that the three-phase equilibrium in the system water - isocctane - aniline is reached at temperatures lower than 118° and is extended up to a temperature of 81.2°. Data given in the diagrams (Fig 5) are in contradiction to data given in the monography by Anosov and Pogodin (Ref 5). The dependence of the geometrical character of the diagram on the physico-chemical properties of the components and their interaction is confirmed by the study of the equilibrium temperature conditions in the system water-isocctane - aniline. There are 5 figures and 5 references, 3 of which are Soviet.

ASSOCIATION:

Permskiy gosudarstvennyy universitet imeni A. M. Gor'kogo,ka-fedra neorganicheskoy khimii (Perm' State University imeni

Card 3/4

A. M. Gor'kiy, Chair of Inorganic Chemistry)

67840 Investigation of the Equilibrium of the Liquid Investigation of the Equilibrium of the Liquid S/153/59/002/06/011/029 Phases in the System Water - Isooctane - Aniline B115/B000

SUBMITTED: June 9, 1958

Card 4/4

ZHURAVLEV, Ye.F.; SHEVELEVA, A.D.; VESELUKHINA, I.A.

Determination of the molecular weight of the binary system chloral hydrate - pyramidon in maphthalene as the solvent.

Izv.vys.ucheb.zav.; khim.i khim.tekh. 2 no.6:891-894 '59.

(MIRA 13:4)

1. Permskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.

Kafedra neorganicheskoy khimii.

(Chloral) (Aminopyrine) (Naphthalene)

ZHURAVLEY, Ye.F.; SHEVELEVA, A.D.

Study of solubility of water salt systems by the graphoanalytical method of sections. Zhur. neorg. khim. 5 no.11:2630-2637 N '60. (MIRA 13:11)

1. Permskiy gosudarstvennyy universitet imeni A.M.Gor'kogo, Kafedra neorganicheskoy khimii.
(Solubility) (Systems (Chemistry))

ZHURAVLEV, Ye.F.; SHEVELEVA, A.D.; BOGDANOVSKAYA, R.L.; KUDRYASHOV, S.F.; SHCHUROV, V.A.

Solubility in the ternary water - salt systems containing cerium nitrate and an alkali metal nitrate. Zhur. neorg. khim. 8 no.8: 1955-1963 Ag '63. (MIRA 16:8)

1. Permskiy gosudarstvennyy universitet.
(Cerium nitrates) (Alkali metal nitrates)
(Solubility)

ACCESSION NR: AP4039266

s/0078/64/009/006/1435/1440

AUTHOR: Sheveleva, A. D.; Bogdanovskaya, R. L.; Zhuravlev, Ye. F.

TITIE: Solubility of cerium (III) chloride in water and in salt solutions.

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 6, 1964, 1435-1440

TOPIC TAGS: cerium chloride, sodium chloride, potassium chloride, cuprous chloride, solubility, phase equilibrium, rare earth metal

ABSTRACT: The study of aqueous solutions which contain Ce(III) chloride reveals the relationship of cerium chloride and various salt components in a broad range of concentrations and temperatures. Such knowledge is important in the development of technology for the separation and purification of rare earth elements. The determination of the solubility of salt components was conducted by the isothermal cross-section method. The measurements were made of the change of the refractive index of the liquid phase at constant temperature as a function of the composition of the resulting complex. The refractive indeces were measured with an Abbe refractometer. The data are given for the solubility of CeCl₃ in water at 10, 20, 30, 40 and 50 C. The solubilities in CeCl₃-NaCl-H₂O and CeCl₃-KCl-H₂O systems were

Card 1/2

ACCESSION NR: AP4039266

studied at 30 and 50 C and in CeCl₂-CuCl₂-H₂O system at 20 and 50 C. Under these conditions these salts do not form solid solutions or binary salts. In all cases the solid phase consisted of CeCl₃·7H₂O and CuCl₂·2H₂O. Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: None

SUBMITTED: 04Mar63

ENCL: 00

SUB CODE: IC

NO REF SOV: 007

OTHER: 001

Card 2/2

BOGDANOVSKAYA, R.L.; SHEVELEVA, A.D.; ZHURAVLEV, Ye.F.

Solubility in the system $Ce(NO_3)_3 - LiNC_3 - H_2^{20}$ at 10, 20, and $30^{\circ}C$. Zhur. neorg. khim. 10 no.7:1713-1715 Ji '65. (MIRA 18:8)

1. Permskiy gosudarstvennyy universitet.

BUKHOVETS, S.V.; SHEVELEVA, A.O. ...

Compounds of platinum with tetraphenylbutynediol and dimethyldihexylbutynediol. Zhur. neorg. khim. 9 no.2: 471-472 F'64. (MIRA 17:2)

SHEVELLEIN A S.

AUTHORS: Anfimova, Ye. A. and Sheveleva, A.S. (Moscow) 24-9-31/33

TITLE: On studying the electro-kinetic properties of oxided lead minerals during flotation. (Ob izuchenii elektro-kineticheskikh svoystv okislennykh svintsovykh mineralov pri flotatsii).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.9, pp. 159-162 (USSR)

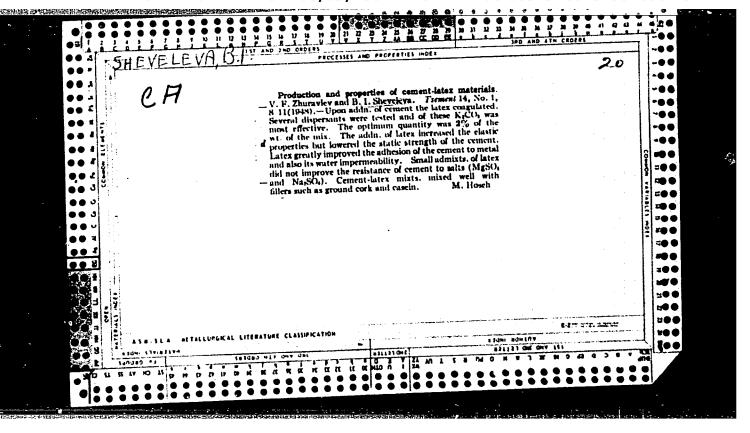
An attempt was made to apply the electro-kinetic ABSTRACT: method for elucidating the influence of differing concentrations of sodium sulphide on the changes of the € -potential of the surface of oxided lead minerals, e.g. of cerussite, wulfenite, mimetite and bedantite. Additionally, the influence was investigated of butyl potassium xanthogenate and of various concentrations of hydrogen ions on the changes of the electro-kinetic potential on the surfaces of the here named minerals. The &-potential at the boundary solid to solution was evaluated by the electro-osmosis method; theoretically the real. &-potential is a function of the nature and the composition of the solid surface and also of the concentration of the solution bounding on it. The results are tabulated and plotted in graphs. Fig.l and Table 2 give the influence of the sodium sulphide concentrations Card 1/3

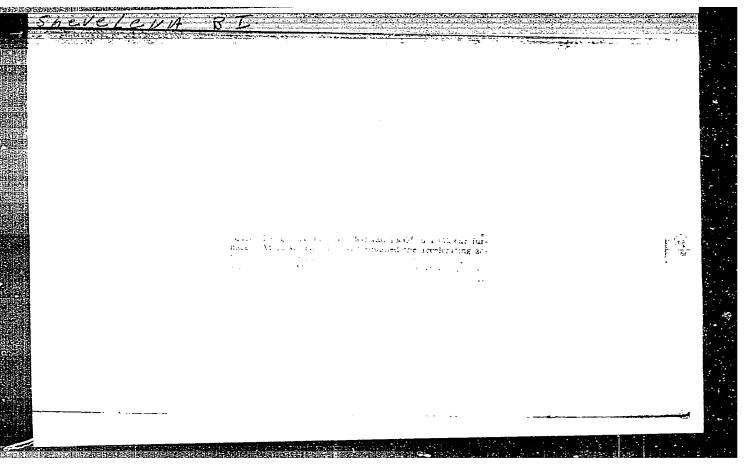
24-9-31/33

On studying the electro-kinetic properties of oxided lead minerals during flotation.

on the change of the electro-kinetic potential of the particle surface; Fig. 2 and Table 3 give the influence of the concentration of hydrogen ions on the changes of the electro-kinetic potential of the particle surface. Table 1 gives the \$ -potential of the individual minerals in distilled water, whilst Table 4 gives data on the influence of butyl xanthogenate on the changes in the electro-kinetic potential in the sulphidised surface. It was experimentally confirmed that the depressing influence of increased sodium sulphide concentrations can be attributed to the formation of a high charge on the surface of the mineral particles due to adsorption of negatively charged ions of bivalent sulphur located in the solution as a result of hydrolysis of sodium sulphide. It was also established that the magnitude of the **\xi**-potential depends on the pH of the solution. The obtained results show that it is necessary to take into consideration the role of the electric charges in studying the mechanism of flotation but the mechanism is too complicated and investigations should not be restricted to determining solely the \ -potentials,

Card 2/3





SHEVELEVAS 612. OKORKOV, S.D.; GOLYNKO-VOL'FSON, S.L.; SHEVELEVA, B.I.; YARKINA, B.I.

Mineralizing effect of certain native minerals and industrial waste products in the process of burning portland cement clinkers. TSement (MIRA 11:4) 24 no.1:16-18 Ja-Fe '58.

(Portland cement)

SHENKER, S.I., inzh.; BARBASHEV, G.K., inzh.; SHEVELEVA, G.P., inzh.; USTINOV, A.A., inzh.

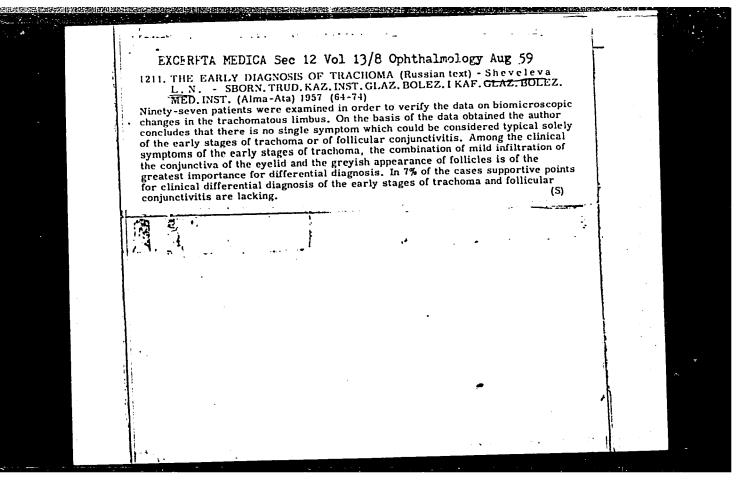
Operation of automatic shaft furnaces. TSement 31 no.1:16-18
Ja-F '65. (MIRA 18:4)

1. Slantsevskiy tsementnyy zavod.

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EVI(1)/I44270-66 SOURCE CODE: UR/0299/65/000/022/B036/B036 ACC NRI AR6011880 Skripka, L. I.; Lysenko, Z., A.; Sheveleva, K. Ye. B AUTHOR: Distribution of actinomycete antagonists in Poltavsk Oblast soils TITLE: SOURCE: Ref. zh. Biologiya, Abs. 22B240 REF SOURCE: 5b. Antibiotiki. Kiev, Zdorov'ya, 1965, 91-96 soil bacteriology, microorganism contamination TOPIC TAGS: ABSTRACT: From 306 samples of chernozem, clay and sandy soils of Poltavsk Oblast, 5900 strains of actinomycetes were isolated belonging to 98 species of 15 series; among these 62.7% antagonists were found. The highest percentage of antagonists was found in low humus chernozem, sandy loam soil, and common chernozem soil. It was shown that plants exert a lesser influence on the general level of actinomycetes than soil type. The highest number of actinomycetes was found during the summer (2019.3.10)/g) and the lowest number was found during the spring (1188.4.103/g). Representatives of the following dominated in the isolated cultures: Act. griseus var. purpurescens (11.3%), Act. griseolus (8.7%), Act. olivaceus (6.2%), Act. griseoveriablis (6.1%) and Act. lavendulae (6%). 94.7% of the isolated actinomycete cultures 615.799.90 UDC: Card 1/2

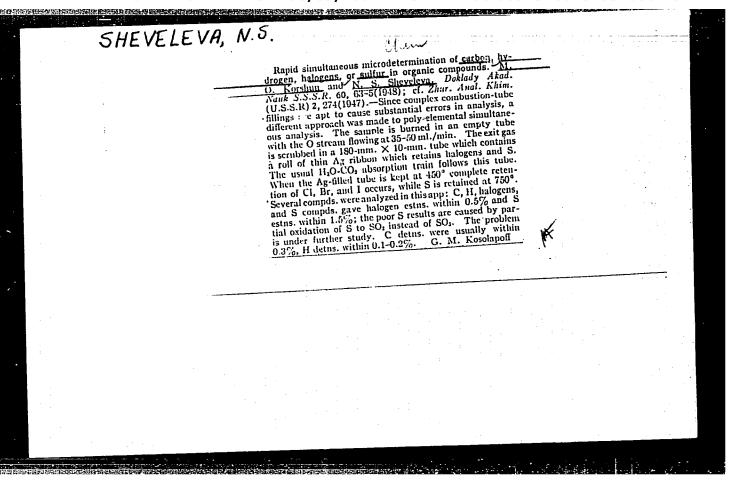
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epressed the growth of Staph, aureus 26.2% depressed enterococcus, 26.5% departs and 20.5% depressed pressed pressed to a state of abstract.	209, 84.2% depressed bac. In pressed E. coli, 11.3% depressed E. kuznetsov.	ressed	
SUB CODE: 06,08	t [*]		
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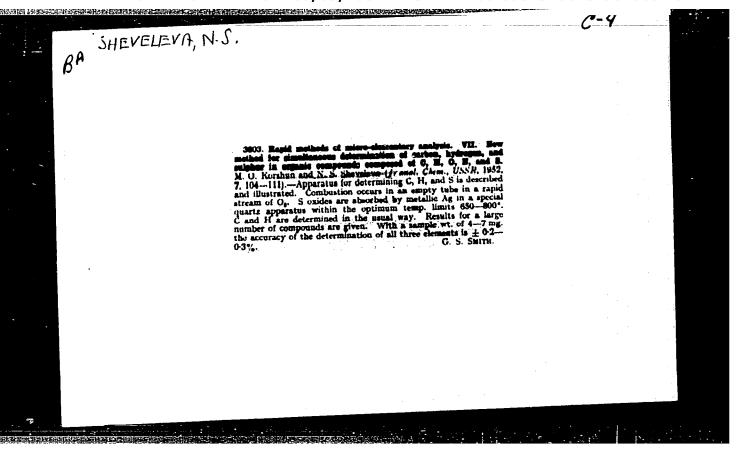


SHEVELEVA, L.N.

Case of opthalmomyiasis caused by the gadfly larva. Zdrav. Kazakh. (MIRA 17:5)

1. Iz Kazakhskogo nauchno-issledovatel skogo instituta glaznykh bolezney (nauchnyy rukovoditel -kand. med. nauk I.N. Shevelev).





ShEUELEUA, N.S.

USSR/Analytical Chemistry - Analysis of Organic Substances

G-3

Abs Jour

: Referat Zhur - Khimiya, No 2, 1957, 4823

Author

Korshun, M.O., Sheveleva, N.S.

Title

: Rapid Methods of Microelemental Analysis. Communication

X. Concerning Concurrent Determination of Carbon,

Hydrogen and Halogens in Organic Halogen Compounds

Orig Pub

: Zh. analit. khimii, 1956, 11, No 4, 376-382

Abstract

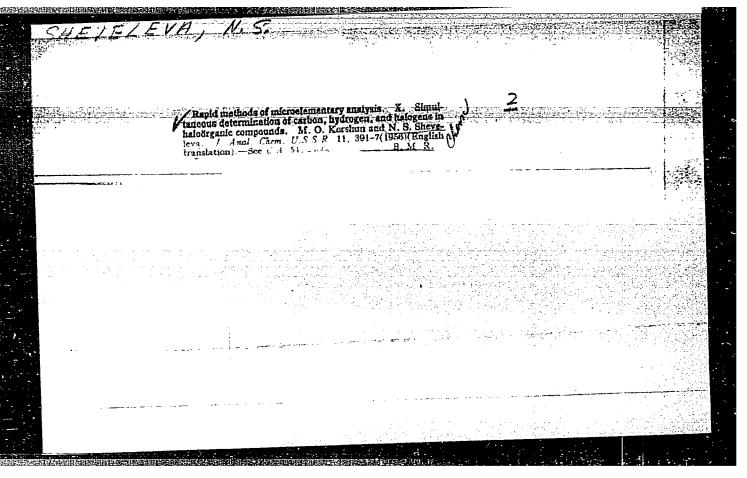
Improvement of the previously proposed method of pyrolytic combustion of organic halogen compounds (Doll. AN SSSR, 1948, 60, 63). Determination of halogens is carried out at 550-600°; 2-3 mg of coiled Ag screen or ribbon are sufficient for 30-40 determinations; to enhance the accuracy of weighing it is recommended to utilize larger samples (7-8 mg). On determination of C there are obtained values that are too low, since presence of halogens prevents complete oxidation of C. To eliminate this effect use is made of a Pt-catalyst at 900-9500. Determination errors: C and H ± 0.1-0.3%, halogen ± 0.1-0.6%.

Card 1/1

- 49 -

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001549320002-5"



GEL'MAN, N. Ye.; KORSHUN, M. O.; SHEVELEVA, N. S.

Rapid methods of elementary microanalysis. Report No. 14:
Determining microquantities of carbon and hydrogen in fluorine
organic compounds [with summary in English]. Zhur.anal.khim.
12 no.4:526-533 Jl-Ag '57. (MIRA 10:10)

1.Institut elementoorganicheskikh soyedineniy AN SSSR, Moskva. (Carbon) (Hydrogen) (Fluorine organic compounds)

5(3) AUTHORS:

Korshun, M. O., Gellman, N. E.,

SOV/75-13-6-16/21

Sheveleva, N. S.

TITLE:

Rapid Methods of Micro-Elementary Analysis (Skorostnyye metody mikroelementarnogo analiza) Communication 15. On the Problem of Simultaneous Micro-Determination of Carbon, Hydrogen, and Halogens in Organic Compounds (Soobshcheniye 15. K voprosu ob odnovremennom mikroopredelenii ugleroda, vodoroda i galoidov v

organicheskikh soyedineniyakh)

PERIODICAL:

Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 6, pp 695-701

(USSR)

ABSTRACT:

It was established in earlier papers (Refs 1-4) that the presence of halogens or of compounds containing halogens in the combustion of organic substances hinders exidation of carbon to CO2. Therefore, a platinum contact must be used in this case for the quantitative exidation. Recently, the authors developed a method for burning in a sc-called "hull" which allows to improve the determination of C, H and halogens considerably (Ref 5). A new variant of this method is described in the present paper. In the vessel containing the weighed portion, silver, and the

Card 1/4

Rapid Methods of Micro-Elementary Analysis. SOV/75-13-6-16/21 Communication 15. On the Problem of Simultaneous Micro-Determination of Carbon, Hydrogen, and Halogens in Organic Compounds

oxidation zone follow one another in the combustion tube in the direction of the gas current. Both silver and the vessel containing the weighed portion are placed in a thin hollow quartz hull, which is weighed out after combustion. In this case no platinum contact is required in the oxidation zone (Ref 4) and the adoption of the hull allows the silver to be weighed out. The hull weighs about half of the former massive appliance and therefore secures a far better reproducibility of halogen determination. No combustion tubes with ground apparatus are required any longer. Tube life is also prolonged, as it cannot be corroded by the silver contained in the hull. Pure metallic silver in the form of a foil, a net or a wire is used for the absorption of halogens. Only 1.5 g Ag are required, which is much less than the formerly used appliance called for. The silver layer is heated to 550-600° by means of a MAG-6R electric burner. From 30 to 40 determinations can be carried out with the used amount of silver. A temperature increase from 425-to 575° causes the absorbability of silver to increase considerably. In the case of temperatures being low to an extent at which it is

Card 2/4

Rapid Methods of Micro-Elementary Analysis. SOV/75-13-6-16/21 Communication 15. On the Problem of Simultaneous Micro-Determination of Jarbon, Hydrogen, and Halogens in Organic Compounds

not possible to work with an Ag net or foil, other large surface silver preparations have a good absorbability. In this connection the authors investigated silvered pumice, as silver deposited upon a porous carrier efficiently absorbs halogens and corrodes the quartz hull much less than metallic silver. A granulated, silvered pumice prepared according to Sokolova's method (Ref 7) was highly suitable for the determination. Absorbability of this preparation is almost twice that of electrolytic silver (Ref 6). Halogen absorption may thus be carried out at 425° instead of at 575°, in which connection corrosion on the hull is so slight that it can be repeatedly used again. Carrying out of this new determination method as well as the results of the several analyses are accurately described. This method can also be used for the determination of C, H, and S and for that of some other elements from a weighed portion. There are 3 figures, 7 tables, and 14 references, 13 of which are Soviet.

Card 3/4

Rapid Methods of Micro-Elementary Analysis. SOV/75-13-6-16/21 Communication 15. On the Problem of Simultaneous Micro-Determination of Carbon, Hydrogen, and Halogens in Organic Compounds

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR, Moskva

(Institute of Organic Elemental Compounds of the Academy of

Sciences, USSR, Moscow)

SUBMITTED: September 12, 1957

Card 4/4

SHEVELEVA, N.S.; LITVINOV, A.Ye.

Geocryological research in the Krasnoyarsk area. Vest. AN SSSR
29 no.6:118-119 Je '59. (MIRA 12:5)

(Krasnoyarsk--Karst) (Soil mechanics)

5.5230

77757 sov/75-15-1-19/29

AUTHORS:

Korshun, M. O. (deceased), Sheveleya, N. S., Gel'man,

N. E.

TITLE:

Rapid Methods of Microanalysis. Communication 17. Simultaneous Determination of Carbon, Hydrogen, Mercury,

and Halogen in a Single Sample of Organic Substance

PERIODICAL:

Zhurnal analiticheskoy khimii, 1960, Vol 15, Nr 1,

pp 99-103 (USSR)

ABSTRACT:

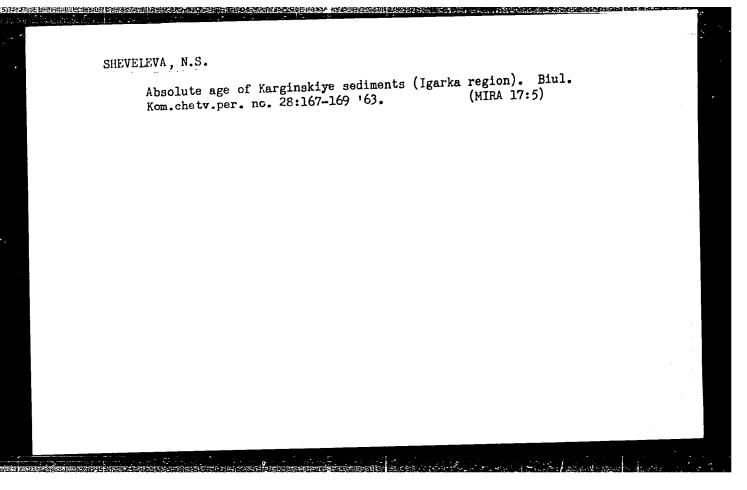
The article describes determination of mercury and

halogen (or sulfur) since carbon and hydrogen

are determined by the usual methods. An organic sample is subjected to rapid pyrolytic combustion in which the resulting mercury vapors are retained by gold (thin wire or foil) and halogen by silver (screen, wire, or foil). Silvercoated pumice cannot be used since it retains part of the mercury and distorts the experimental results. After the retention, mercury and halogen are determined

gravimetrically. The experimental error is not more

Card 1/2



Cuantitative elementary analysis of organic components. Miles - Guantitative elementary analysis of organic components. Miles - determination of carbon and hydrogen by burning in a wile test tube. Zhur. anal. khim. 20 no.5:715-726 165.

1. Institut elementoorganicheskich nyodinenty An 1028 Moskva.

GEL-MAN, N.E.; BRESLER, P.I.; RUZIN, B.N.; GREK, N.V.; SHEVELEVA, N.S.;
MEL-NIKOVA, A.A.

New method for the automatic microdetermination of carbon and hydrogen in organic compounds. Dokl. AN SSSR 161 no.1:107-110 (MTRA 18:3) Mr 65.

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Spetsialnoye konstruktorskoye byuro analiticheskogo priborostroyeniya AN SSSR. Submitted July 29, 1964.

SHEVELEVA, O. N.

SHEWELEVA, O. N.: "Experience in 12 years of cultivating Rickettsia pro-

wazekii using the epidermal membrane method, and the results of studying their biological properties." Molotov State Medical Inst.

Omsk, 1956. (Dissertation for the Degree of Candidate in

Biological Sciences.)

Source:

Knizhnaya letopis'

No 40

1956

Moscow

E-5

USSR/Virology - Rickettsias.

: Ref Zhur - Biol., No 15, 66999 Abs Jour

: Pshenichnov, A.V., Sheveleva, O.N., Noskova, E.G. Author

Inst

: The Inconstancy of Rickettsias Prowazekii and a Perspective for Preparing Live Epidemic Typhus (Lice-Born) Vaccine. Title

: Zh. rikrobiol., epidemiol. i immuno-biologii, 1957, No 7, Orig Pub

11-14.

The rickettsias prowazekii were kept for $12\frac{1}{2}$ years in body Abstract

lice, using the epidermomembrane method for passing (440 passages). After that time, the rickettsias from this strain (No 5/6 b) lost their capsules, their toxicity decreased approximately ten-fold, their "anti-leucocytic" properties decreased three-fold. Their virulence for lice increased and that for guinea pigs was lost; only small doses of rickettsias sometimes produced a rise in temperature. This strain was tested as a vaccine on guinea pigs

Card 1/2

HEVELLEVIL OU

USSR/Virology - Human and Animal Viruses.

E-3

Abs Jour

: Ref Zhur - Biol., No 4, 1958, 14599

Author

: Sheveleya, O.N.

Inst

Title : Intensity of Immunity in Typhus.

Orig Pub

: Tr. Omskogo med. in-ta, 1957, No 21, 339-341

Abstract

: No abstract.

Card 1/1

Variability of Rickettaia prowazeki and perspectives of obtaining living typhus viaccines. Zour.mikrobiol.epid. i immun. 25 no.7:
11-14 J1 '57.

1. Iz Holotowskogo instituta vaktsin i syvorotok.

(RICKETTSIA MUMAZEKII, variability, role in prep. typhus vancine (Rus))

SHEVELEVA, S. and G. P. EVSTIGNEEV.

Mashinizatsiia ucheta; uchebnoe posobie. Moskva, Gosfinizdat. 1948. 247 p. illus.

Mechanization of the accounting system.

DLC: HF5679.E85

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

EHEVELEVA, S. A.			rΑ ,/Ī<5	
	en e			
	USSR/Engineering - A Computors	pr 1948		
	"Mechanization of Cr/sutation in the Plant 'Di imeni Kirov," S. / Sheveleva, 3 pp	namo'		
;	"Mekh Trud i Tys Rabot" No 4			
	Describes advatinges of using a punch card sys similar to IBM for accounting at subject plan	item,		
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sov/81-59-5-15978

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, p 327 (USSR)

AUTHORS:

Polyak, A.M., Sheveleva, S.S., Uspenskaya, Z.P.

TITLE:

The Replacement of Hydrochloric Acid by Sulfuric Acid in the

Production of Elemental Boron W

PERIODICAL:

Tr. Ural skogo n.-i. khim. in-ta, 1957 (1958), Nr 5, pp 222-227

ABSTRACT;

The results of laboratory and semi-industrial experiments are submitted which showed that in the production of elemental B by reduction of boracic acid with Mg metal (NZhKhim, 1959, 1824) for the liximation of MgO from the sinter commercial contact $\rm H_2SO_4$ can be used (instead of HCl acid). The cost of B is hereby reduced by 10% and working conditions are improved as a result of less gas liberated. The balance of materials in the production

of B is submitted, when using H₂SO_h for lixiviation.

G. Rabinovich

Card 1/1

MOVALEY, N.; SERVELEYA, T.

Preparation of a green food color. Obshchestv.pit. no.6:36-37 Je 160.

(Coloring matter in food)

Note 1571, Me, No. 1 to 1 to 100 to 1

ANUFRIYEVA, Ye.V.: TILARIONOVA, N.G.; KLENIN, S.I.; SHEVELEVA, T.V.

Polarized luminescence study of the Brownian micromotion of luminescent macromolecules. Vysokom.soed. 7 no.1:25-27 Ja 165.

(MIRA 18:5)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.

PIRCHTEYN, T.M.; ANUFRIYEVA, Ye V.; MERRASOVA, T.N.; PTITSYN, O.B.:
SHEVELEVA, T.V.

Hydrophobic interaction and conformation transition in polymethacrylic acid. Wysokom. soed. 7 no.2:372-373 F 165.

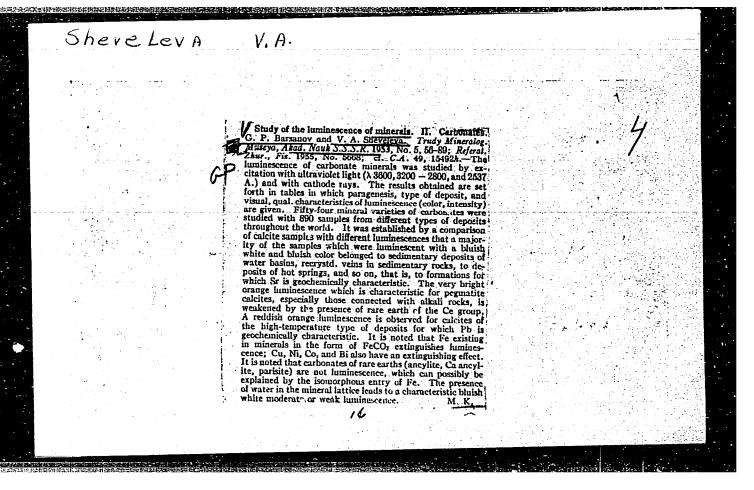
(MIRA 18:3)

P.N.Chirvinskii's so-called foshallassite. Trudy Min.muz. no.1:

P.N.Chirvinskii's so-called foshallassite. Trudy Min.muz. no.1:

(MIRA 9:6)

55-59 '149. (Foshallassite)



K-5

SHEVELEVA, VA

Category : USSR/Optics - Physical Optics

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 2404

: Barsanov, G.P., Sheveleva, V.A. Author

: Materials on the Study of the Luminescence of Minerals. III. Salts of Title

Oxygen Acids

Orig Pub : Tr. Mineral. muzeya (AN SSSR), 1954, 6, 29-48

Abstract : A study was made of the luminescence of 955 specimens of minerals, belonging

to the following classes of slats of oxygen acids: sulfates, phosphates, arsenates, vanadates, borates, chromates, tungstenates, molybdates, antimonates, and nitrates. The luminescence phenomenon was established for 41 minerals of the following types (including 24 minerals for which it was established for the first time): 3 Assenates, 16 sulfates, 10 phosphates, 9 borates, 1 tungstenate,

1 molybdate, and 1 nitrate.

Card

SHEVELEAR A)

Category : USSR/Optics - Physical Optics

K-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 2405

: Barsanov, G.P., Sheveleva, V.A. Author

: Materials on the Study of the Luminescence of Minerals. IV. Oxides, Sulfides, Title

and their Analogues.

Orig Pu : Tr. Mineral. muzeya AN SSSR, 1955, vyp. 7, 3-11

Abstract : Out of 945 specimens of 163 types of minerals, only 13 displayed luminescence, seven belonging to the collomorphic and cryptocrystalline varieties of SiO2, four being oxides and one a sulfide. Glow was noted in agate, alexandrite, brucite, hyalite, hydrargillite, corundum, silicon, opal, carnelian, chalcedony, chrysoprase, spinel, and sphalerite. The white and blue-white glow of varieties of SiO2 is attributed to adsorption water; the orange, green-yellow, and violet glow is caused by impurities (Mn compounds, '(UO2)2, rare earths, etc.). In the remaining five minerals the cation lattice points are occupied with ions with weak polarization properties, which are not chromofores (Mg2+, Zn2+, Al3+). It is the authors' opinion that when activator-atoms with strong polarization properties are introduced, crystallofosphors are formed, and the presence of strong chromophores (Fe²⁺, Fe³⁺, Mn³⁺, Cr³⁺ and others) in the lattice points leads to extinction. This explains the limited number of luminescent minerals

: 1/2 Card

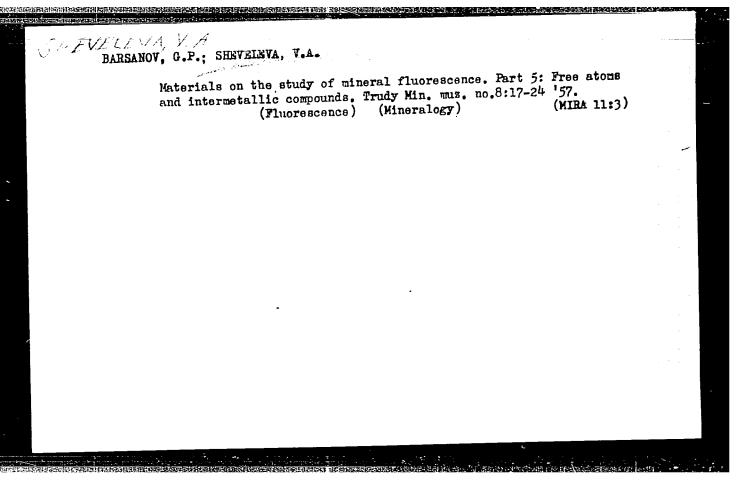
Category : USSR/Optics - Physical Optics

K-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2405

in the oxide and sulfide class. Tables of luminescent materials are given listed by the color of glow produced by excitation with ultraviolet rays at

3600 A, 3200-2800 A, and 2500 A and also with cathode rays.



MAKSYUTIN, Yu.K.; FROLOV, Yu.L.; KALABINA, A.V.; SHEVELEVA, V.A.

Hydrogen bonding between phen ls and viryl and aryl ethers.

Zhur.fiz.khim. 38 no.ll:2604-2607 N 164. (MIRA 18:2)

1. Irkutskiy gosudarstvennyy universitet imeni Zhdanova.

SHEVELEVA, V. I.

Production and properties of cement-latex materials - V. F. Zhuravlev and V. I. Sheveleva. Tsement 14, No. 1, 8-11 (1948). - Upon addn. of cement the latex coagulated. Several dispersants were tested and of these K2CO3 was most effective. The optimum quantity was 2% of the wt. of the mix. The addn. of latex increased the elastic properties but lowered the static strength of the cement. Latex greatly improved the adhesion of the cement to metal and also its water impermeability. Small admixts. of latex did not improve the resistance of cement to salts (MgSO4 - and Na2SO4). Cement-latex mixts. mixed well with fillers such as ground cork and casein.

Central George and Observatory, Red Army, (19h3)

"To the Question of Diurnal Course of the Coefficient of Turbulent Diffusion."

In. AK. NAUK SESS, Ser. Geograf. i Geofiz., No. 1-6, 19hh.

SHEVELEVA, V.S. Determining the wind velocity at a given altitude on the basis of data available at the earth's surface. Trudy NIU. Ser.1 no.25:87-92

(MERA 7:4)
(Winds)

- 1. EVENTOV, Ya. S.; SHEVELEVA, V. S.
- 2. USSR (600)
- 4. Chalk Astrakhan' Province
- 7. Chalk deposits in Astrakhan', Dokl. AN SSSR, 86, No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

ZKHUS, I.D.; Prinimali uchastiye: VAGINA, G.P.; VASIL&YEVA, L.B., MARASANOVA, N.V.; SHEVELEVA, V.S.

Characteristics of changes in clay minerals as related to oil formation. Biul.MOIP.Otd.geol. 35 no.4:22-29 J1-Ag 160. (MIRA 14:4)

(Clay) (Petroleum geology)

SHEVELEVA. V.S.
BYKOV, Konstantin Mikhaylovich and SHEYELEVA, V. S.

"Stimulating-Inhibiting System of the Sympathetic Ganglion." Zif. Zhur., Vol 33, No 3, 1947, p 311. Division of General Physiology, Inst of Experimental Medicine, Acad Med Sci USSR.

50: U-4396

James III., V. J.

"Interneuron S maptic Transmission of Merve Impulses." Dr Biol Sci, Inst Emperimental Medicine, Acad Med Sci USSR, Leningrad, 1953. (REhBiol, No 1, Sep 54)

30: 3m: 432, 29 Par 55

USSR/Medicine - Neurology

Card 1/1

Pub. 22 - 47/47

Authors

Sheveleva, V. S.

Title

· Electrophysiological analysis of interneuron synaptic transmission of neural impulses

Periodical

! Dok. AN SSSR 101/6, 1147 - 1150, Apr. 21, 1955

Abstract

The electrophysiological analysis of interneuron synaptic transmission of neural impulses in the upper cervical sympathetic ganglion of a cat, which appears to be a model of synaptic apparatuses of the central nervous system, was made by means of oscillographic registration of the bioelectrical potentials and perfusion of the ganglia. Results obtained are described in detail. Seven references: 3 USSR, 3 English and 1 French (1901-1953). Graphs.

Institution: Acad. of Med. Sc., USSR, Inst. of Exper. Medicine

Presented by: Academician K. M. Bykov, February 9, 1955

SHEVELEVA, V.S

USSH / Medicine - Neurology

Card 1/1

Pub. 22 - 48/49

Authors

Sheveleva, V. S.

Title

The state of inhibition during interneuron synaptic transmission of

impulses

Periodical

Dok. AN SSSR 102/1, 193-196, May 1, 1955

Abstract

Experiments were conducted on cats to determine the complex coordinated relation between the excitation and inhibition processes originating simultaneously in many structures of the central nervous system and to eatablish the relation between electric and humoral factors in the interneuron synaptic transmission of impulses. Results obtained are described. Seven references: 4 Russian and USSR and 3 USA (1866-1955). Graphs.

Institution:

Acad. of Med. Sc., USSR, Inst. of Exp. Medic.

Presented by: Academician K. M. Bykov, February 9, 1955

Sheveleva, V.S.

USSR/ Medicine - Physiology

Card 1/1

Pub. 22 - 58/59

Authors

Bykov, K. M., Academician, and Sheveleva, V. S.

Title

Repeated disturbances in neurons in the sympathetic nervous system

Periodical : Dok. AN SSSR 102/2, 409-412, May 11, 1955

Abstract

The reasons for repeated disturbances in the neurons in the sympathetic nervous system were investigated by means of an electrophysiological method and the results obtained are analyzed. Six references: 3 USA and 3 USSR (1901-1955). Graphs.

Institution: Acad. of Med. Sc., USSR, Inst. of Exper. Med.

Sumbmitted : February 9, 1955

SHEVELEVA, V.S.

Correlation between electrical and humoral factors in the interneuronal synaptic transmission of neural impulses. Izv.AN SSSR.

Ser.biol. no.2:94-107 Mr-Ap '56. (MIRA 9:7)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR.

(NERVES)

MEL'NIKOV, A.V., professor (Leningrad, Suvorovskiy pr. d. 56, kv. 84;)
SHEVELEVA, V.S. (Leningrad, V.O., 16 liniya, d. 47, kv. 61.)

Disturbance of the neurohumoral regulation of body functions in stomach cancer [with summary in English]. Vop. onk., 2 no.6: 683-693 (MLRA 10:4)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav.-deystv. chlen AMN SSSR prof. A.V. Mel'nikov) I Leningradskogo meditsinskogo instituta im. I.P. Pavlova i iz Instituta eksperimental'noy meditsiny AMN SSSR (dir.-prof. D.A. Biryukov)

(STOMACH NEOPLASMS, physiol.

disord. of neurohumoral regulation of body funct. by CNS)

(CENTRAL NERVOUS SYSTEM, in various dis.

cancer of stomach, disord. of neurohumoral regulation
of body funct. in)

SHEVELEVA, V.S.

Excitation and inhibition dynamics in interneural synapses. Izv. AN SSSR. Ser.biol. no.6:54-63 N-D '56. (MIRA 10:1)

1. Institut eksperimental noy meditsiny Akademii meditsinskikh nauk SSSR.

(NERVOUS SYSTEM)

SHEVELEVA, V.S.

Role of calcium and potassium ions in the interneuron synaptic transmission of nerve impulses. Dokl. AN SSSR. 109 no.4:882-884 (MIRA 9:10)

l. Institut ekperimental'noy meditsiny Akademii meditsinskikh nauk SSSR. Predstavelno akademikom K.M. Bykovym.
(NERVES)

SHEVELEVA, V.S.

Electrophysiological evaluation of the functional characteristics of fibers in the cervical sympathetic preganglionic trunk in the cat. Dokl. AN SSSR 110 no.3:487-490 S '56. (MLRA 9:12)

1. Institut eksperimental noy meditsiny Akademii meditsinskikh nauk SSSR. Predstavleno akademikom K.M. Bykovym. (ELECTROPHYSIOLOGY) (NERVOUS SYSTEM, SYMPATHETIC)

USSR / Human and Animal Physiology (Normal and Pathological). Norvous System.

: Rof Zhur - Biologiya, No 13, 1958, No. 60805 Abs Jour

: Shevolova, V. S. Author : AS USSR

Inst : On the Analysis of the Excitation and Inhibition Title

Processes in Nerve Centors

: V st.: Probl. fiziol. tsentr. nervn. sistemy. M.-L. Orig Pub

AN SSSR, 1957, 599-609

: This is a survey of the author's work in the study of the regularities of the mesoneural sympathetic conduction of Abstract the nerve impulses in the superior cervical sympathetic ganglion (SG). With a simultaneous recording of the bicelectric activity (BA) of the cortex (C), hypothelams

(H) and the SG of a rabbit against the background of a pain stimulation of the interceptors, an increase in the BA

Card 1/2

Country : USSR
Cutegory: : Human and Animal Physiology.
The Nervous System. Vegetative Nervous System.

About the contract of the Ist nerve tract (I of 10 inysec) or the 2.6 nerve tract (I of 5 imp/sec).
At the same time, a decrease in the contraction magnitude of the 3rd palpebra was observed. When the I frequency of the 2nd and 3rd nerve tracts (rulpel fibers of shall size) was increased to be imp/sec and reinforced by stimulating the 1st nerve tract, inhibitory influences became more pronounced. On the contrary, simultaneous I of

: USSR Country The Hervous System. Vegetative Nervous System.
Abs. Joan.: Ref Lhur-Diol., No 20, 1950, 106817 : Human and Animal Physiology. Author Institut. Titlo Onis Pub. : the 1st and 4th nerve tracts (pulpal fibers of Abstract medium and large size) produced increased bio-(cont) electric ganglion activity and frequency rate of 3rd palpebra contractions. As the stimulation rate was increased, inhibitory phenomena were found to be absent. The obtained data are not explained by the presence of special inhibitory and stimulatory nerve factors, but are attributed to the fact that preganglionic fibers 3/4 dard:

SHEVELEVA, V.S.

Functional changes in the sympathetic-adrenal system in cancer of the stomach. Trudy Inst. fiziol. 7:368-381 '58. (MIRA 12:3)

1. Laboratoriya nevro-fiziologicheskikh problem (zav. - K.M. Bykov)
Instituta fiziologii im. I.P. Pavlova AN SSSR.

(STOMACH--CANCER) (NERVOUS SYSTEM, SYMPATHETIC)

(ADRENALIN)

SHEVELEVA, V.S.

Correlation between inhibition and excitation in various segments of the nervous system following the stimulation of afferent nerves and of extero- and interoceptors. Fiziol.zhur. 14 no.9:882-896 S'58 (MIRA 11:12)

1. Laboratoriya nevro-fiziologicheskikh problem Instituta fiziologii imeni I.P. Pavlova AN SSSR, Leningrad.

(CENTRAL NERVOUS SYSTEM, physicl.

eff. of stimulation of afferent nerves & extero& interoceptors on inhib. & irritation correlation
(Rus))

SHEVELEVA, V.S.

Functional state of the different segments of the nervous system in painful trauma and in radiation injury. Trudy Inst.fiziol. 8: 336-348 59. (MIRA 13:5)

1. Laboratoriya neyro-fiziologicheskikh problem (zaveduyushchiy - K.M. Bykov) Instituta fiziologii im. I.P. Pavlova AN SSSR.

(PAIN) (NERVOUS SYSTEM) (RADIATION--PHYSIOLOGICAL EFFECT)

SHEVELEVA, V.S.

Electrophysiological analysis of disorders of the trophic effects of the nervous system during development of malignant tumors; based on data from animal experiments. Biul.eksp.biol. i med. 48 no.10:69-74 0 159. (MIRA 13:2)

1. Iz Instituta fiziologii imeni I.P. Pavlova AN SSSR, Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(NEOPLASMS exper.)

(NERVOUS SYSTEM physiol.)

SHEVELEVA, V.S.

Electrophysiological analysis of functional conditions of various segments of the nervous system in shock. Biul.eksp.biol.i med. 48 no.11:43-40 N 159. (MIRA 13:5)

1. Iz Instituta fiziologii imeni I.P. Pavlova (dir. - akademik K.M. Bykov), AN SSSR, Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskin.

(SHOCK exper.)

(NERVOUS SYSTEM physiol.)

SHEVELEVA, Veronika Sergeyevna; MIKHEL'SON, M.Ya., red.; KHARASH, G.A., tekhn.red.

[Intermuncial stimulus transmission in the sympathetic ganglia]
Mezhneironnaia peredacha vozbuzhdeniia v simpaticheskikh
gangliiakh. Leningrad, Medgiz, 1961. 150 p.

(MIRA 15:5)

(NEUROCHEMISTRY) (NERVOUS SYSTEM, SYMPATHETIC)

SHEVELEVA, V.S.

Development of "spontaneous" bioelectric activity in different parts of the nervous system in ontogenesis. Dokl. AN SSSR 142 no.1:249-252 Ja 62. (MIRA 14:12)

1. Institut evolyutsionnoy fiziologii im. I.M. Sechenova AN SSSR. Predstavleno akademikom V.N. Chernigovskim.
(ELECTROPHYSIOLOGY) (NERVOUS SYSTEM)

SHEVELEVA, V.S.

Electrophysiological analysis of the reactivity of nerve cells of different levels of the nervous system in ontogenesis. Dokl. AN SSSR 142 no.2:493-495 Ja '62. (MIRA 15:2)

SHEVELEVA, V.S.

Evolution of neurohumoral excitation control in the interneuronal synapses of the brain. Dokl. AN SSSR 150 no.2:441-444 My 163.

(MIRA 16:5)

1. Institut evolyutsionnoy fiziologii im. I.M.Sechenova AN SSSR. Predstavleno akademikom V.N.Chernigovskim.

(ELECTROENCEPHALOGRAPHY) (NEUROCHEMISTRY)

Card :

50V/96-58-10-12/25Grishuk, I.K. (Cand. Tech. Sci.) The influence that the time of standing in the accumulator tank The influence that the time of standing in the accumulator (Vilyaniye has on the effectiveness of removal of oxygen from water.) Sheveleve, V.Ve (Engineer) Perfilov, A.I. (Engineer) prodolzhitel nosti prebyvaniya vody v bake-akkumulyatore na AUTHORS: effektivnost' udaleniya kisloroda). Teploenergetika, 1958, No.10. pp. 51-53 (USSR) It is usually considered that the removal of oxygen from water is TITLE: mainly completed in the de-aeration column, and that time of standing in the accumulator tank has no appreciable influence. is difficult to verify this belief in plant under operating conditions without altering the height through which the jets fall; this alteration affects the results. PERIODICAL: this alteration affects the results. Tests were made to determine the effect of standing time on the degree of owners. the effect of standing time on the degree of oxygen removal. A ABSTRACT: full-scale de-aeration installation was used, having two accumulator tanks, each of 20 cu.m. capacity, as sketched in Fig.2. A 200 ton/hr tanks, each of 20 cu.m. capacity, as sketched in Fig. 2. A 200 ton/nr de-aeration column installed over the main tank was connected to the auxiliary tank at both steam-and water-levels. Samples could be auxiliary tank at noth steam-and water-levels. Samples could be taken from either tank. Analyses of the de-aerated water are plotted tank. in Fig. 3. and show that the oxygen content in the main tank is mrigore and show one oxygen contour in the main that in the auxiliary. This is because the water has greater than that in the auxiliary. Card 1/2

GRISHUK, I.K., kand. tekhn. nauk; SHEVELEVA, V.V., inzh.

Reconstruction of the EKZ DS-200 degassing tower. Elek sta. 30 no.2:26-29 F '59. (MIRA 12:3) (Feed-water purification)

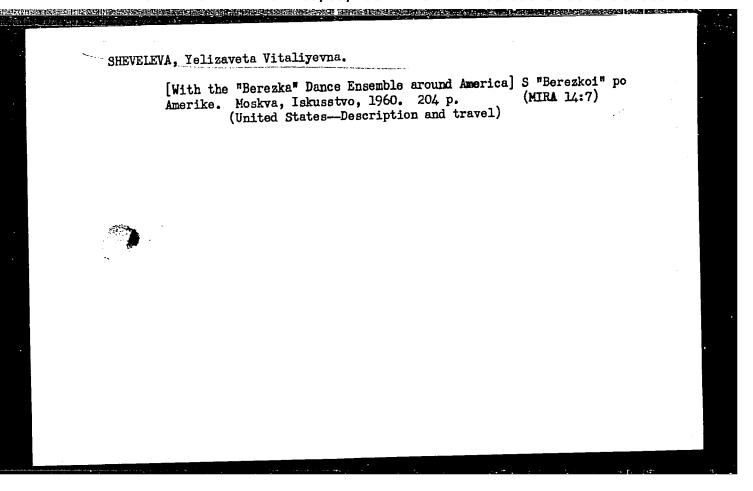
SHEVELEVA, Ye.M.; KRAVCHENKO, V.F.

Effect of diuretin on the coagulability of the blood. Sov. zdrav. Kir. no.3:29-30 My-Je '62. (MIRA 15:5)

1. Iz propedterapevticheskoy kliniki (zav. - dotsent M.M.Mirrakhimov) Kirgizskogo gosudarstvennogo meditsinskogo instituta. (BLOOD--COAGULATION) (THEOBROMINE)

SHEVELEVA, Yekaterina Vasil'yevna; KHOTILOVSKAYA, L., red.; SHUVALOV, I., takhn.red.

[In the Japanese capital] V iaponskoy stolitse. [Moskva] Izd-vo TsK VIKSN *Molodaia gvardiia,* 1958. 94 p. (MIRA 11:6) (Tokyo--Description)



SHEVELEVA, Ye. M.

32746. Lechyeniye kholetsistitov parafinom. Sbornik nauch. Trudov (kirgiz. gos. med. in-t), T. IV, 1949, s. 49-53

S0: Letopis' Zhurnal'nykh Statey, Vol. 44, Moskva, 1949

SHIVELEVA, Ye. Ye.

Organizing practical traning in stockbreeding on a collective farm Organizing practical traning in stockbreeding on a collective farm with little mechanization. Politekh. obuch. no.3:14-18 Mr '58.

(MIRA 11:2)

1. Yemurtlinskaya srednyaya shkola Uporovskogo rayona, Tyumenskoy

oblasti.
(Stock and stockbreeding) (Agriculture-Study and teaching)

(....

POSTNIKOVA, Ye.N.; ZOLIN, G.A.; MARINA, L.V.; NAVRATEL', Z.A., SHEVE-LEVICH, L.M.; SHOR, M.S. (Moskva)

Effectiveness of streptomycin and PAS in treating pulmonary tuberculosis. Prob.tub.no.4:42-46 Jl-Ag '55. (MLRA 8:10)

(TUBERCULOSIS, PUL'ONARY, ther.

PAS & streptomycin)

(SALICYLIC ACID, ther. use
tuberc.pulm. with streptomycin)

(STREPTOMYCIN, ther. use
t.Nerc.,pul.,with PAS)

82673

S/072/60/000/009/003/007 B021/B058

24,3000 15.2120

AUTHORS:

Blokh, K. I., Shevelevich, R. S., Derevyagin, A. N.

TITLE:

Optics - A New Field of Application for Glass Fiber

PERIODICAL:

Steklo i keramika, 1960, No. 9, pp. 19-21

TEXT: A comprehensive study has been conducted lately at the Institut steklovolokya (Institute for Glass Fiber) for the production of light-conducting glass fibers, utilizing their optical properties. Luminous energy can be transmitted by means of a light-conducting texture with arbitrary position of the fibers. Pictures can be transmitted by such a texture at a suitable position of the fibers in it (Fig. 1). The light pipes must exhibit high transparency and high resolving power. The resolving power of the light pipes is determined by the number of discernible target lines, which fall to 1mm of the image field. The utilization of glass fibers as light conductors is based on the phenomenon of the inner total reflection, as can be seen from Fig. 2. The angle of aperture of the rays penetrating into the fiber is the greater, the bigger the difference of the refractive index of the glass-fiber

Card 1/2

82673

Optics - A New Field of Application for Glass Fiber

S/072/60/000/009/003/007 B021/B058

material and the surrounding medium. Investigations by A. L. Korobko-Stefanov showed that the electromagnetic fields of the light wave do not stop at the separation boundary, but propagate within the medium. The investigation results of the transparency of textures from fibers of various diameters, from glasses of various compositions with various fiber casings are tabulated. The coefficients of expansion of the glasses and their casings must be approximately equal, to prevent the forming of cracks. Optical glass fibers of small diameter with high refractive index in a thin optical glass casing with low refractive index must be placed in regular order to obtain light pipes with high resolving power and high transparency. The elimination of the aberration of optical systems is mentioned among the many problems which can be solved by means of fiber light pipes, the paper by G. G. Slyusarev being mentioned. These light pipes can also be used in electronic optics. There are 2 figures, 1 table, and 3 Soviet references.

ıΧ

Card 2/2

24069 5/072/61/018/006/001/002 B103/B215

15, 2120

Shevelevich, R. S.

TITLE:

AUTHOR:

Supervision of the constancy of the chemical composition of

glass on the basis of its optical properties

PERIODICAL: Steklo i keramika, v. 18, no. 6, 1961, 14 - 17

TEXT: The author was concerned with the measurement of the optical properties of glass for industrial supervision of the constancy of its chemical composition for industrial purposes. So far, the index of refraction and the total dispersion had been used for the purpose only in the case of aluminoborosilicate glass (for obtaining glass fibers). However, the author deems these methods to be useful also for other branches of glassmaking. They are based upon the additive character of the dependence of a physical property upon the chemical composition (A. A. Appen, DAN, v. 69, no. 6, p. 841, 1949). For calculating the range of the values of the refractive index n_D and of dispersion $(n_F - n_C) = D$ corresponding to the industrial tolerances of the chemical composition, the following function was applied:

Card 1/7

2h069 \$/072/61/018/006/001/002 B103/B215

Supervision of the...

$$y = \sum_{i=1}^{m} \frac{x_i^0 / o \Phi_i}{100}$$
 (1)

where y denotes the physical property in the corresponding units, $\mathbf{x_1}$ the content of oxide in the glass in mole%, $\Phi_{\mathbf{i}}$ the effective value of the physical property of the oxide. Hence, the author concludes that the physical property is a multiple-valued function of the composition; therefore, the problem cannot be solved by the physical constant alone. The above methods consist in that glass of a certain chemical composition $(\mathbf{x_1} \dots \mathbf{x_m})$ is taken as a standard which, according to its zero deviation (as compared to the standard), corresponds to all values of m (chemical components). Certain values of the index of refraction and of dispersion \mathbf{n} and \mathbf{n} correspond to the composition of the standard. A

certain change of the index Δn_D and of dispersion ΔD must correspond to every deviation of the composition from the standard value $(\Delta x_1, \dots, \Delta x_m)$. Eq. (1) also holds for the differential values:

Card 2/7

24069 \$/072/61/018/006/001/002 B103/B215

Supervision of the...

$$\Delta n_{D} = \sum_{i=1}^{m} \frac{\Delta x_{i}^{o}/oN_{i}}{100}$$
 (2) and $\Delta D = \sum_{i=1}^{m} \frac{\Delta x_{i}^{o}/oD_{i}}{100}$ (3),

where N_i and D_i are the effective values of the index of refraction and of the total dispersion, respectively, of the oxide in the glass. For a certain range of compositions, Δn_D and ΔD can be represented in the form of an Abbe diagram. Hence, the values of Δn_D and ΔD corresponding to the tolerances can be determined from Eqs. (2) and (3) if two additional conditions are fulfilled:

1) $\sum_{i=1}^{m} \Delta x_i = 0$ (4).

By this identity, the sum of components of the changed glass composition can be brought to 100%.

2) $a_1 \propto \Delta x_1 \sim b_1; \ldots a_m \propto \Delta x_m \sim b_m$ (5).

This system of inequalities represents the tolerances of the chemical composition. Since an exact solution of Eqs. (2) and (3) is very difficult, the author suggests a selection of Δx_1 ; $\Delta x_2 \dots \Delta x_m$ for which (5) Card 3/7

24,069 S/072/61/018/006/001/002 B103/B215

Supervision of the...

has to be taken into account. He gives an example of calculating $\Delta n_{\rm max}$ and $\Delta n_{\rm min}$ (in mole%; in parantheses: tolerances in % by weight of all oxides in the glass concerned): $\Delta x_1(Na_20)=+1.04$ (2.00); Δx_2 (SiO₂) = = -1.04 (1.00); Δx_3 (CaO) = +0.56 (0.5); Δx_4 (Al₂O₃) = -56 (1.0); Δx_5 (MgO) = +0.44 (0.5); Δx_6 (B₂O₃) = -0.44 (0.5) (6). It is seen that by such a choice of deviations, both (4) and (5) are fulfilled. $\Delta n_{\rm max}=+26\cdot10^{-4}$ and $\Delta n_{\rm min}=-27\cdot10^{-4}$ are calculated from (2) and (3); the latter value is corrected on the basis of experimental data. Finally, the following extreme values are assumed: $\Delta n_{\rm max}=+3.5\cdot10^{-4}$ and $\Delta n_{\rm min}=-4.0\cdot10^{-4}$. The standard sample chosen was glass of the following composition (in %): 54.16 SiO₂, 14.18 Al₂O₃, 15.9 CaO, 4.03 MgO, 9.88 B₂O₃, 1.66 Na₂O; $n_{\rm max}=1.5478$, $n_{\rm max}=90.1\cdot10^{-4}$. The range of permissible values thus obtained is represented in an Abbe diagram (Fig.). The theoretical assumptions were verified in the Merefyanskiy stekol'nyy zavod (Merefa Glassworks). The specimens used for measuring $n_{\rm max}$ and $n_{\rm max}=1.00$ made from glass balls by grinding and polishing an area of 0.3 - 0.4 cm². They

Card 4/7

到125年的运动的运动的国际企业的发生的国际企业的企业的发生的企业的企业的企业的企业的企业的

Supervision of the...

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were annealed to 700°C, cooled at a rate of 6 deg/min, and then measured in the Mf2-22 (IRF-22) standard refractometer (Table). From a comparison of the permissible error of the chemical analysis with the accuracy of the IRF-22 instrument, the author concludes that the errors are commensurable. The table indicates that the chemical composition of the specimens 1, 4, 7, 9, 12, 16, and 18 corresponds to the tolerances, while that of 13 - 15 and 17 does not. The values of D of the specimens 2, 3, 8, 10, and 11 cannot be clearly classified. The preparation of one specimen does not take more than 1.5 hr. Finally, it is noted that this method is more sensitive to fluctuations of the chemical composition than that of chemical analysis. It can be used for any process of glass manufacture. There are 1 figure, 1 table, and 4 Soviet-bloc references.

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SHEVELEVICH, R. S.

"Some investigations of the structure of silicate glass fibres by methods of radio spectroscopy."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

GG, WH WW EWT(1)/EWT(m)/EWT(n) L 2.2232-05 ACC NR AP6007263 UR/0363/66/002/002/0390/0394 (N)Shevelevich, R.S. AUTHOR: ORG: All-Union Scientific Research Institute for Glass Plastics and Glass Fibers (Vsesoyuznyy nauchno-issledovatel'skly institut stekloplastikov i steklyannogo volokna) Electron paramagnetic resonance in silicate glass fibers TITLE: SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v.2, no.2, 1966 390-394 TOPIC TAGS: glass fiber, silicate glass, electron paramagnetic resonance ABSTRACT: An electron paramagnetic resonance signal with a frequency of 9370 megacycles at 3000k was observed in glass fibers of different composition in an air medium. A standard RE 1301 spectrometer was used. The samples of glasses and glass fibers, in the form of finely dispersed powder (a weighed portion of 130-150 mg) were in thin walled quartz ampules with a diameter of 4 mm, placed in the resonating cavity of the spectrometer. In all cases, the weighed portions of the samples of glass of a given composition and the fiber obtained from it did not differ by more than 0.2 mg. The magnetic field was calibrated by proton resonance. The Card 1/2 UDC: 677.52'538.113